

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Tsuda et al.	§	
	§	Group Art Unit: 3623
Serial No. 10/056,106	§	
	§	Examiner: Kalyan K. Deshpande
Filed: January 25, 2002	§	
	§	
For: Workflow System and Method	§	
With Skip Function	§	

**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**

36736
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Notice of Appeal, filed in this case on December 26, 2006.

A fee of \$500.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0461. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0461. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0461.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-20.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1-20
4. Claims allowed: None
5. Claims rejected: 1-20
6. Claims objected to: None

C. CLAIMS ON APPEAL

The claims on appeal are: 1-20

STATUS OF AMENDMENTS

A Final Office Action was mailed September 26, 2006. A Response to Final Office Action was filed November 27, 2006. An Advisory Action was mailed December 19, 2006, failing to place the application in condition for allowance. A Notice of Appeal was filed December 26, 2006.

SUMMARY OF CLAIMED SUBJECT MATTER

A. CLAIM 1 - INDEPENDENT

The subject matter of claim 1 is directed to a workflow system, comprising design computer terminals for designing a workflow (Specification, p. 10, ll.2-19; and Figure 1, #10), operation computer terminals for executing the workflow (Specification, p.10, ll.2-19; and Figure 1, #20), and a workflow server for managing the workflow connected to the design computer terminals and operation computer terminals via a network (Specification, p.10, ll. 2-19; and Figure 1 #30). The design computer terminals design the workflow by defining in advance activities that may be skipped and re-execution points in the workflow where previously skipped activities are executed (Specification, p. 12 ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30), and wherein said workflow server performs skip processing and reassignment processing for said operation computer terminals based on said workflow designed by said design computer terminals (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

B. CLAIM 3 - INDEPENDENT

The subject matter of claim 3 is directed to a workflow system, comprising computer terminals for executing a workflow (Specification page 10, lines 2-19; and Figure 1, #20), and a workflow server for managing said workflow connected to the computer terminals via a network. (Specification page 10, lines 2-19; and Figure 1, #30) The workflow server comprises means for defining a process flow by assigning transactions to predetermined operators, who operate the computer terminals, based on a workflow definition, means for performing skip processing automatically or manually according to directions from said computer terminals for skipping part of the process flow by skipping one of said operators to whom the transaction is assigned, and means for reassigning the skipped transaction to said one of said operators skipped by said means for performing skip processing, wherein the skipped transaction is executed (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

C. CLAIM 5 - INDEPENDENT

The subject matter of claim 5 is directed to a workflow server for managing a workflow connected to a plurality of computer terminals (Specification, p. 10, ll.2-18; page 14, line 7, through page 16, line 5; Figure 1, #30). The workflow server comprises means for assigning to a predetermined person a transaction performed as a business process transaction, means for performing skip processing to skip the transaction assigned to said person, and means for assigning re-execution of the transaction to the skipped persons at predetermined timing in said workflow (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

D. CLAIM 7 - INDEPENDENT

The subject matter of claim 7 is directed to a workflow server for managing a workflow connected to a plurality of computer terminals (Specification, p.14, ll.7-16; and Figure 5, #30), comprising a workflow definition management subsystem for managing workflow definitions (Specification, p.14, ll. 17-26; and Figure 5, #31), said workflow definitions being designed to define a workflow that includes nodes that may be skipped and recovery nodes, the recovery nodes indicating points in the workflow where skipped nodes are executed (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30); process management subsystem for managing processes created by using the workflow definitions (Specification, p.15, ll.1-12; and Figure 5, #32), a client request management subsystem for accepting a request from a person operating said computer terminal (Specification, p.15, ll.13-21; and Figure 5, #33), and a user management subsystem for controlling assignment of a person based on stored information about said person (Specification, p. 15, ll. 22-28; and Figure 5, #34).

E. CLAIM 10 – INDEPENDENT

The subject matter of claim 10 is directed to an information processing apparatus for defining a workflow to be executed by a plurality of computer terminals connected to a network (Specification, p. 10, ll.2-18; and page 14, line 7, through page 16, line 5), comprising a plurality of nodes corresponding to business processes assigned to persons in charge of execution of the workflow (Specification, p.10, line 26, through page 11, line 17), means for establishing a

workflow using paths to connect the plurality of nodes (Specification, p.10, line 26, through page 11, line 17), means for establishing at least one node among said plurality of nodes in the workflow that may be skipped during execution of the workflow (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30), and means for establishing at least one recovery node in said workflow to define points on the workflow where transactions that were part of the at least one skipped node are executed (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

F. CLAIM 13 - INDEPENDENT

The subject matter of claim 13 is directed to a method for defining a workflow executed at a plurality of computer terminals connected to a network (Specification, p. 10, ll. 2-19; and Figure 1, #10), the method comprising the steps of defining a workflow by defining nodes that serve as business processes that are assigned to persons in charge of execution of the workflow (Specification, p. 10, line 26, through page 11, line 17), designating at least one of said nodes as a node that may be skipped during the execution of the workflow (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30), and designating at least one recovery node that indicates a re-execution point in the workflow where the persons in charge of a previously skipped node re-execute the skipped business processes (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

G. CLAIM 16 - INDEPENDENT

The subject matter of claim 16 is directed to a method for executing a workflow executed at a plurality of computer terminals connected to a network (Specification, p. 10, ll. 2-19), the method comprising the steps of assigning activities that are performed as transactions of business processes in the workflow to predetermined persons who operate the computer terminals (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30), performing skip processing to skip at least one activity assigned to said persons Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30, and assigning re-execution of the at least one activity

skipped to said persons whose assigned activities have been skipped, at a predetermined time in said workflow (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

H. CLAIM 19 - INDEPENDENT

The subject matter of claim 19 is directed to a computer-readable storage medium for storing a program code executable by a computer (Specification, p.8, ll. 18-27), the program code comprising the steps of establishing nodes serving as business processes that are assigned to persons in charge of execution of a workflow, the nodes being included in the workflow(Specification, p. 10, line 26, through page 11, line 17); indicating that at least one of the nodes of the workflow may be skipped if the business processes of the at least one node cannot be completed when the workflow defines that the at least one node is to be executed (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30), and establishing at least one recovery node where the persons in charge of skipped nodes re-execute the business processes (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

I. CLAIM 20 - INDEPENDENT

The subject matter of claim 20 is directed to a computer-readable storage medium for storing a program code executable by a computer (Specification, p. 8, ll. 18-27), the program code comprising the steps of assigning activities that are performed as a transaction of business processes in a workflow to predetermined persons in charge, performing skip processing to skip one or more activities assigned to said persons, and assigning re-execution of the skipped activities to said persons whose assigned activities have been skipped, at a predetermined time in said workflow (Specification, p. 12, ll. 4-28; page 13, lines 1-14; and page 17, lines 13-30).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to review on appeal are as follows:

1. Whether claims 7-10 and 12-15 are anticipated by *DeFrancesco, Jr.* et al. (US Patent No. 6,505,176, filed January 7, 2003, hereafter referred to as "*DeFrancesco*") under 35 U.S.C. § 102(e);
and
2. Whether claims 1-6, 11, and 16-20 are obvious over *DeFrancesco* in view of *Gabbita*, et al. (US Patent No. 6,349,238, filed February 19, 2002, hereafter referred to as "*Gabbita*") under 35 U.S.C. § 103(a).

ARGUMENT

A. GROUND OF REJECTION 1 (Claims 7-10 and 12-15)

The Examiner has rejected claims 7-10 and 12-15 under 35 U.S.C. § 102(e) as being anticipated by *DeFrancesco, Jr. et al* (US Patent No. 6,505,176, filed January 7, 2003, hereafter referred to as "*DeFrancesco*"). This position is not well-founded.

DeFrancesco does not anticipate Applicants' claims because *DeFrancesco* does not teach executing skipped steps. Once a step is skipped in *DeFrancesco*, that step is not executed at a later time.

Applicants' claim 7 describes the workflow including nodes that may be skipped. Recovery nodes indicate points in the workflow where skipped nodes are executed.

Applicants' claim 10 describes means for establishing a node in the workflow that may be skipped. There are points on the workflow where transactions that were part of the skipped node are executed.

Applicants' claim 13 describes designating at least one node in the workflow that may be skipped during the execution of the workflow. A recovery node is designated that indicates a re-execution point in the workflow where the persons in charge of a previously skipped node re-execute the business processes of that node.

Applicants' claims describe nodes that may be skipped. The claims describe points in the workflow where nodes that were originally skipped are executed.

DeFrancesco teaches one environment in which the invention of *DeFrancesco* can be used. The environment is within a lending institution for processing loan and credit applications. Steps used to process loan applications, and the order in which these steps are processed, vary widely among lending institutions. See *DeFrancesco*, column 2, lines 4-12.

A workflow is defined that includes these steps. A user can build a workflow definition 404 by defining and selecting workflow steps. *DeFrancesco*, column 8, lines 12-16. There are three types of steps. The steps are either "normal", "exception", or "automatic" steps. *DeFrancesco*, column 8, lines 22-25. The workflow management system evaluates the steps to determine their status (incomplete, not applicable (N/A), complete, or waived), and determines which steps are next activated. Steps that have not already been skipped or waived need to be

completed. The steps that have not already been skipped or waived have a status of either “incomplete” or “complete”. The steps that are skipped are tagged with a N/A status.

“Skip tests are used to determine the presence of a specified criteria that would cause the associated step 418 to be tagged with a status of N/A as shown by status block 416. Steps 418 having a status 416 of N/A do not apply to the workflow, and are therefore skipped. For example, one step may be to send out a decline letter to the applicant. However, this step should be skipped if the applicant is granted a loan.” *DeFrancesco*, column 9, lines 57-64. Thus, as the example makes clear, skipped steps are not repeated because they are not necessary. It is not necessary, and would make no sense, to send a decline letter to an applicant that has already been granted a loan. There would be no reason to attempt to complete an unnecessary step.

DeFrancesco provides additional information about skip tests in column 10, lines 23-25, which states: “Skip Tests - Tests that are tested to determine if there is a special circumstance that would cause the step to not apply to the workflow and therefore be skipped.” If a test does not apply, it should not be executed at a later time.

The completion tests are used to determine if a step has been completed. *DeFrancesco*, column 10, lines 20-25. Once the step has been completed, its status is changed from “incomplete” to “complete”. The completion tests are used for steps that have not been skipped. Skipped steps do not have a status of either “complete” or “incomplete”. If a step has either a status of “complete” or “incomplete”, that step was not skipped.

“Exception steps are used to manage any exceptions encountered in the normal processing of credit applications. Exception steps are typically configured to follow the actual step that causes the exception.” *DeFrancesco*, column 8, lines 32-35. “A exception test set is used to determine if an exception should be made.” *DeFrancesco*, column 11, lines 9-10.

Exception tests are tests that are only applicable for exception-type steps and act as both skip and completion tests for exception steps. See *DeFrancesco*, column 10, lines 22-23. When determining whether a “normal” or “exception” step should be skipped, *DeFrancesco* uses the skip tests. “If the process step is of the type exception 414, the completion and skip tests 422 are the same. Accordingly, the rules 412 associated with an exception step are both the skip and completion rules.” *DeFrancesco*, column 13, lines 38-41. Therefore, when determining whether an exception step should be skipped, the exception tests act just like the skip tests described above. Therefore, the discussion above regarding the skip tests applies to exception tests as well.

Thus, according to *DeFrancesco*, an exception test can be used to determine whether a step should be skipped or whether it should be completed. *DeFrancesco* does not describe executing a skipped step until that step is completed. Throughout *DeFrancesco*, skipped steps are never described as being executed. Skipped steps are described as being skipped and marked “not-applicable”.

Steps that need to be executed are marked as being either complete or incomplete. When a step has been executed, it is marked as being complete. When a step that needs to be executed has failed, it is marked as being incomplete. Attempts are then made to execute these incomplete steps until they are executed. Once executed, their status is changed from incomplete to complete.

The status of a step provides an additional indication of whether the step was skipped. Skipped steps, whether normal steps or exception steps, never have a status of “incomplete” or “complete”. Skipped steps are always described as having the status “not-applicable”, or “N/A”.

Exception steps can either be skipped, or they need to be completed. If they are skipped, they have a “not-applicable” status, and are not executed. If the step needs to be completed, the completion tests are used to determine if the step has been completed. The exception steps that need to be completed, i.e. the steps that have not been skipped, have an “incomplete” status until they are completed; when they are completed they have a “complete” status.

The Examiner asserts that *DeFrancesco* teaches the execution of skippable steps, referring to column 13, lines 38-50. Specifically, the Examiner states that “when an exception step fails either the skip test or the completion test, a user will be prompted to take action and re-execute the step until it passes both the skip and completion test (see column 13, lines 38-50)”. Applicants respectfully disagree that this is what is taught by *DeFrancesco*.

DeFrancesco, column 13, lines 38-50, states:

If the process step is of the type exception 414, the completion and skip tests 422 are the same. Accordingly, the rules 412 associated with an exception step are both the skip and completion rules. Thus, for exception steps, if at least one of the rules fail, an exception is indicated and the status 416 for the step is incomplete. This will prompt attention from a user, that action is required to complete the process step. Once the user performs the required action, these tests will be executed again. If at that time, all of the tests pass, the step will be tagged with a complete status. If all of the tests for an exception step pass the first time through, there is no exception and the rule is skipped. The status 416 for a skipped exception rule is non-applicable (N/A).

The section of *DeFrancesco* quoted above first teaches that the skip tests and completion tests are the same for the exception-type steps. This section then goes on to describe what happens if a test (described here as a “rule”) fails for an exception-type step. The tests that might fail are the completion tests. If an exception-type test fails, the step is marked as being “incomplete”. Steps that are marked as being incomplete prompt attention from a user. Once the user performs the action, the completion tests are executed again until all completion tests pass.

Furthermore, it does not make sense that a completion test would be performed on a step that has already been skipped. If a step has been skipped, that step is not-applicable, and is not performed. A completion test would be used only on steps that need to be performed.

The section of *DeFrancesco* quoted above does not describe executing skipped steps until the skipped steps have been completed. Skipped steps never have a status of “complete”. They always have a status of “N/A”. Because the step described above is tagged with a “complete” status, the step was not skipped.

In the rejection, the Examiner uses the term “skippable”. The Examiner states that *DeFrancesco* teaches “skippable” steps. Applicants respectfully disagree that *DeFrancesco* teaches executing skippable steps. *DeFrancesco* does not teach “skippable” steps. *DeFrancesco* does not use the term “skippable” anywhere in the reference. *DeFrancesco* teaches only “skipped” steps.

DeFrancesco does not anticipate Applicants’ claim 7 because *DeFrancesco* does not teach the workflow including nodes that may be skipped and recovery nodes that indicate points in the workflow where skipped nodes are executed.

DeFrancesco does not anticipate Applicants’ claim 10 because *DeFrancesco* does not teach means for establishing a node in the workflow that may be skipped, where there are points on the workflow where transactions that were part of the skipped node are executed.

DeFrancesco does not anticipate Applicants’ claim 13 because *DeFrancesco* does not teach designating at least one node in the workflow that may be skipped during the execution of the workflow, where a recovery node is designated that indicates a re-execution point in the workflow where the persons in charge of a previously skipped node re-execute the business processes of that node.

Because *DeFrancesco* does not teach all of the features of Applicants' claims, *DeFrancesco* does not anticipate Applicants' claims. The remaining claims depend from the independent claims discussed above and are patentable for the reasons given above.

B. GROUND OF REJECTION 1 (Claims 1-6, 11, and 16-20)

The Examiner has rejected claims 1-6, 11, and 16-20 under 35 U.S.C. § 103(a) as being unpatentable over *DeFrancesco* in view of *Gabbita*, et al. (US Patent No. 6,349,238, filed February 19, 2002, hereafter referred to as "*Gabbita*"). This position is not well-founded.

The combination of *DeFrancesco* and *Gabbita* does not render Applicants' claims obvious because the combination does not teach executing skipped steps or performing reassignment of the activities.

Claim 1 describes activities that may be skipped and re-execution points in the workflow where previously skipped activities are executed.

Claim 3 describes means for skipping part of the process flow by skipping one of the operators to whom a transaction is assigned, and means for reassigning the skipped transaction to the skipped operator wherein the skipped transaction is executed.

Claim 5 describes skipping the transaction assigned to a person and then assigning re-execution of the transaction to the skipped person. The re-execution is assigned at a predetermined timing in the workflow.

Claim 16 describes skipping the transaction assigned to a person and then assigning re-execution of the transaction to the skipped person. The re-execution is assigned at a predetermined timing in the workflow.

Claim 19 describes indicating that at least one of the nodes of the workflow may be skipped if the business processes of the node cannot be completed when the workflow defines that the node is to be executed. The recovery node is established where the persons in charge of skipped nodes re-execute the business processes.

Claim 20 describes skipping one or more activities assigned to persons, and assigning re-execution of the skipped activities to the persons whose assigned activities have been skipped.

The Examiner states that *DeFrancesco* teaches re-performing skipped activities. The Examiner goes on to state that *DeFrancesco* does not teach performing reassignment of the activities. The Examiner relies on *Gabbita* to teach the features believed missing from *DeFrancesco*.

The Examiner relies on *Gabbita*, column 3, lines 7-14, and column 29, lines 20-67, as teaching reassigning workflow processes. These sections of *Gabbita* teach a user being able to transfer and re-assign a workflow step. The user can use a remote workstation to do this.

Applicants' claim 1 describes re-execution points in the workflow where previously skipped activities are executed. These skipped activities are those that were skipped. As discussed above, *DeFrancesco* does not teach executing skipped activities. *Gabbita* also does not teach executing skipped activities. *Gabbita* teaches merely that a user can transfer a workflow step and assign it to another. Transferring a workflow step is not the same as executing activities that were skipped.

Neither *DeFrancesco* nor *Gabbita* teaches activities that may be skipped and re-execution points in the workflow where previously skipped activities are executed. Therefore, the combination of *DeFrancesco* and *Gabbita* does not render Applicants' claim 1 obvious.

The remaining claims describe features that are similar to the features of Applicants' claim 1 discussed above and are patentable for the reasons given above.

Because neither *DeFrancesco* nor *Gabbita* teaches the features of Applicants' claims, the combination of *DeFrancesco* and *Gabbita* does not render Applicants' claims obvious.

C. CONCLUSION

DeFrancesco does not anticipate Applicants' claims 7-10 and 12-15 because *DeFrancesco* does not teach executing skipped steps. Once a step is skipped in *DeFrancesco*, that step is not executed at a later time.

The combination of *DeFrancesco* and *Gabbita* does not render Applicants' claims 1-6, 11, and 16-20 obvious because the combination does not teach executing skipped steps or performing reassignment of the activities.

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CLAIMS APPENDIX

The text of the claims involved in the appeal are:

1. A workflow system, comprising:
design computer terminals for designing a workflow;
operation computer terminals for executing said workflow; and
a workflow server for managing said workflow connected to said design computer terminals and operation computer terminals via a network, wherein said design computer terminals design the workflow by defining in advance activities that may be skipped and re-execution points in said workflow where previously skipped activities are executed, and wherein said workflow server performs skip processing and reassignment processing for said operation computer terminals based on said workflow designed by said design computer terminals.
2. The workflow system of Claim 1, wherein said design computer terminals design the workflow using a plurality of nodes serving as activities that perform transactions, at least one recovery node serving as said re-execution point, and paths connecting the nodes and recovery node.
3. A workflow system, comprising:
computer terminals for executing a workflow; and
a workflow server for managing said workflow connected to said computer terminals via a network, wherein said workflow server comprises:

means for defining a process flow by assigning transactions to predetermined operators, who operate said computer terminals, based on a workflow definition;

means for performing skip processing automatically or manually according to directions from said computer terminals for skipping part of the process flow by skipping one of said operators to whom the transaction is assigned; and

means for reassigning the skipped transaction to said one of said operators skipped by said means for performing skip processing, wherein the skipped transaction is executed.

4. The workflow system of Claim 3, wherein said computer terminals send out completion of the transaction to the workflow server after performing the transaction assigned by said workflow server, wherein said transaction assigning means of the workflow server assigns a next transactor in response to the completion of said transaction from said computer terminals.

5. A workflow server for managing a workflow connected to a plurality of computer terminals, comprising:

means for assigning to a predetermined person a transaction performed as a business process transaction;

means for performing skip processing to skip the transaction assigned to said person; and

means for assigning re-execution of the transaction to the skipped persons at predetermined timing in said workflow.

6. The workflow server of Claim 5, wherein said skip processing is performed when a skip request is received from a predetermined computer terminal connected to a network or when predefined conditions are satisfied.

7. A workflow server for managing a workflow connected to a plurality of computer terminals, comprising:

a workflow definition management subsystem for managing workflow definitions, said workflow definitions being designed to define a workflow that includes nodes that may be skipped and recovery nodes, the recovery nodes indicating points in the workflow where skipped nodes are executed;

a process management subsystem for managing processes created by using said workflow definitions;

a client request management subsystem for accepting a request from a person operating said computer terminal; and

a user management subsystem for controlling assignment of a person based on stored information about said person.

8. The workflow server of Claim 7, wherein said process management subsystem automatically or manually ends an activity that is determined to be skipped, the activity serving as a transaction for each person forming said process, and then starts a next activity.

9. The workflow server of Claim 8, wherein said process management subsystem stores information about the skipped activity as a skip list and assigns the skipped activity to an

appropriate person by referring to the skip list when proceeding to processing of said recovery node while performing activities in sequence.

10. An information processing apparatus for defining a workflow to be executed by a plurality of computer terminals connected to a network, comprising:

a plurality of nodes corresponding to business processes assigned to persons in charge of execution of the workflow;

means for establishing a workflow using paths to connect the plurality of nodes;

means for establishing at least one node among said plurality of nodes in the workflow that may be skipped during execution of the workflow; and

means for establishing at least one recovery node in said workflow to define points on the workflow where transactions that were part of the at least one skipped node are executed.

11. The information processing apparatus of Claim 10, wherein said means for establishing a flow displays said plurality of nodes with predetermined flow icons and connects said flow icons using said paths, while said means for establishing at least one recovery node displays said at least one recovery node with at least one predetermined recovery icon and connects said at least one recovery node with predetermined nodes using said paths.

12. The information processing apparatus of Claim 10, further comprising means for defining conditions for causing an automatic skip operation for said at least one skippable node established by said means for establishing said at least one skippable node.

13. A method for defining a workflow executed at a plurality of computer terminals connected to a network, the method comprising the steps of:

defining a workflow by defining nodes that serve as business processes that are assigned to persons in charge of execution of the workflow;

designating at least one of said nodes as a node that may be skipped during the execution of the workflow; and

designating at least one recovery node that indicates a re-execution point in the workflow where the persons in charge of a previously skipped node re-execute the skipped business processes.

14. The method of Claim 13, further comprising the steps of:

forming a workflow using said established nodes and paths to determine a sequence of the business processes; and

establishing said at least one recovery node at predetermined points on said workflow.

15. The method of Claim 13, further comprising the step of establishing conditions for skipping any of said established nodes determined to be skippable.

16. A method for executing a workflow executed at a plurality of computer terminals connected to a network, the method comprising the steps of:

assigning activities that are performed as transactions of business processes in the workflow to predetermined persons who operate the computer terminals;

performing skip processing to skip at least one activity assigned to said persons; and
assigning re-execution of the at least one activity skipped to said persons whose
assigned activities have been skipped, at a predetermined time in said workflow.

17. The method of Claim 15, wherein a list of said activities assigned to each person is stored as a wordlist, and wherein a transaction is performed by retrieving a transaction request from said work list.

18. The method of Claim 16, wherein information about any of said persons whose assigned activities have been skipped is stored as a skip list, and wherein re-execution of the skipped activities is performed in sequence based on the information stored in said skip list.

19. A computer-readable storage medium for storing a program code executable by a computer, the program code comprising the steps of:

establishing nodes serving as business processes that are assigned to persons in charge of execution of a workflow, the nodes being included in the workflow;

indicating that at least one of the nodes of the workflow may be skipped if the business processes of the at least one node cannot be completed when the workflow defines that the at least one node is to be executed; and

establishing at least one recovery node where the persons in charge of skipped nodes re-execute the business processes.

20. A computer-readable storage medium for storing a program code executable by a computer, the program code comprising the steps of:

assigning activities that are performed as a transaction of business processes in a workflow to predetermined persons in charge;

performing skip processing to skip one or more activities assigned to said persons; and
assigning re-execution of the skipped activities to said persons whose assigned activities have been skipped, at a predetermined time in said workflow.

EVIDENCE APPENDIX

There is no evidence to be presented.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.